

A. 35 U.S.C. § 101

In the Office Action mailed on March 8, 2005, claim 32 was rejected under 35 U.S.C. § 101 for referring to a human being. Applicant has amended claim 32 so that the term “mouth” is replaced by “mouthpiece.” Since claim 32 does not refer to a human being, the rejection has been overcome and should be withdrawn.

Note that claim 32 has been amended to correct an obvious omission/typographical error and so is not related to patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), overruled in part, 535 U.S. 722 (2002).

B. 35 U.S.C. § 103

1. Dietz, Rienmueller et al. and Anderson et al.

a. Claims 15 and 29-31

Claims 15 and 29-31 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Dietz, Rienmueller et al. and Anderson et al. Applicants traverse the rejection for several reasons. First, Anderson et al. is directed to nonanalogous art. The test for nonanalogous art is as follows:

The determination that a reference is from nonanalogous art is therefore two-fold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Deminski, 796 F.2d 436, 230 U.S.P.Q. 313 (Fed. Cir. 1986) citing In re Wood, 559 F.2d 1032, 1036, 202 U.S.P.Q. 171, 174 (C.C.P.A. 1979).

Upon applying the first prong of the test, one sees that Anderson et al. is not within the Applicants' field of endeavor. Applicants' claimed invention is in the field of methods and apparatuses for delivering radiation therapy during suspended ventilation. This is confirmed by reviewing 1) the "Field of the Invention" section of Appellants' Specification at page 1, lines 5-8 and 2) the preamble of claim 15 which recites "[a]n apparatus for suspending ventilation in a patient and delivering radiation therapy to the patient during suspended ventilation." In contrast, Anderson et al. discloses a phototherapeutic treatment for psoriasis that does not in any way include suspending ventilation of a patient. Instead, Anderson et al.'s patient 10 breathes normally and does not have his or her breathing suspended. The Office Action has not disputed the fact that Anderson et al. does not suspend ventilation. Indeed, page 2 of the Office Action states that Dietz is recited to teach ventilation suspension. Thus, Anderson et al. is not within Applicants' field of endeavor - delivering radiation therapy during suspended ventilation.

Besides not being within the Applicants' field of endeavor, it is clear that Anderson et al. is not reasonably pertinent to the particular problem with which the Applicants were involved. As stated on page 3 of Applicants' specification, the problem of organ and tumor movement during radiotherapy due to motion of the lungs and diaphragm is the concern of Applicants' claimed invention.

It is clear that Anderson et al. does not address Applicants' problem. Instead, Anderson et al. regards applying phototherapy to the skin of a patient 10 in a sufficient manner so as to achieve clearing up the psoriasis without causing painful sunburn-like reactions. (Col. 2, ll. 9-10). While Anderson et al. does disclose either using a table 12 designed to have a patient remain steady while standing (Col. 9, ll. 28-31) or a table designed to reduce patient movement

while lying down (Col. 9, ll. 31-34), nowhere does Anderson et al. disclose or suggest that lung or diaphragm movement of the patient 10 hinders the ability to determine the proper phototherapy to the skin of the patient 10. It is noted that the Office Action has not disputed that Anderson et al. does not address Applicants' problem.

Assuming for arguments sake that Anderson et al. is deemed analogous art, it is respectfully submitted that the combination of Dietz, Rienmueller et al. and Anderson et al. under § 103 is improper, because of a lack of motivation to do so. In particular, claim 15 recites "an abort switch adapted to halt the apparatus for administering radiation therapy and open a closed one of the first and second selectively operable valves." The Office Action has conceded that both Dietz and Rienmueller et al. do not disclose the recited abort switch. Anderson et al. does not solve the deficiencies of Dietz and Rienmueller et al. in that Anderson et al. is directed to an apparatus for delivering ultraviolet radiation to discrete areas of a patient's skin. Anderson et al. is completely unrelated to any type of suspension of breathing during radiation therapy (see, for example, Figures 1 and 2). It is noted that the Office Action has relied on a "kill switch" mentioned at column 12, lines 3-5 of Anderson et al. as providing motivation to use the recited abort switch in Dietz "to allow termination of radiation therapy if the correct parameters are not optimum (col. 13, lines 58-63)." However, Anderson et al.'s "kill switch" only performs the function of closing shutter 36 and terminating "delivery of therapeutic doses of radiation to the patient." (Col. 12, ll. 3-5). Anderson et al. fails to have the "kill switch" also open a closed valve that is adapted to either control inhalation or exhalation of the patient in the manner recited in claim 15. Furthermore, Anderson et al.'s shutter 36 that is controlled by the "kill switch" cannot properly be viewed as a valve adapted to control inhalation and/or exhalation of a patient.

Rather, as expressly described by Anderson et al., the shutter 36 simply controls transmission of radiation to the skin of a patient by positioning "...the screen to block the beams, or pass the beams through one of the apertures." (Col. 11, ll. 14-16). It is noted that the Office Action asserts that "Dietz/Rienmueller is fully capable of performing the same function" based on col. 4, lines 1-5 of Rienmueller et al. The passage states:

When possible, the patient 4 may hold the spirometer 8 himself, and may thus actively interrupt the examination at any time if shortness of breath occurs. The brief interruption of the respiratory flow therefore does not present a risk to the patient.

The above passage merely suggests that if the patient has shortness of breath, he or she removes the spirometer 8 from his or her mouth to enable improved breathing and the radiologist does not activate the x-ray imager while the spirometer 8 is removed. The above process in no way discloses or suggests claim 15's abort switch. Since there is no motivation to combine Anderson et al. with either Dietz or Rienmueller et al. in the manner suggested by the Office Action, the rejection is improper and should be withdrawn.

Regarding the rejection of claims 29-31, the Office Action refers to U.S. Patents Nos. 5,111,809; 5,479,920 and 6,571,796 as ventilators using two one-way valves. However, the rejection at page 3 of the Office Action only refers to Dietz, Rienmueller et al. and Anderson et al. as being relied on to reject the claims. Applicants request clarification of this rejection. Even if the above three patents were combined with Dietz, Rienmueller et al. and Anderson et al. they would not overcome the improperness of the rejection. First, U.S. Patent No. 6,571,796 does not qualify as prior art. Second, the remaining two patents do not suggest using the recited abort switch in either Dietz, Rienmueller et al. and Anderson et al.

b. Claim 33

Claim 33 was rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Dietz, Rienmueller et al. and Anderson et al. Applicants traverse the rejection for several reasons. First, as shown above in Section B.1.a Anderson et al. is directed to nonanalogous art. Second, claim 33 recites “an abort switch adapted to halt the apparatus for administering radiation therapy and open the selectively operable valve.” For reasons similar to those given above in Section B.1.a with respect to claim 15, there is no motivation to combine Anderson et al. with Dietz and Rienmueller et al. in the manner suggested by the Office Action since Anderson et al. fails to have its “kill switch” also open a selectively operable valve that is adapted to control both inhalation and exhalation of the patient as recited in claim 33. Accordingly, the rejection is improper and should be withdrawn.

2. Dietz, Rienmueller et al., Anderson et al. and Beran

a. Claims 23-26

Claims 23-26 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Dietz, Rienmueller et al., Anderson et al. and Beran. Claims 23-26 depend directly or indirectly on claim 15. Accordingly, the rejection is improper since Anderson et al. is directed to non-analogous art. In addition, Dietz, Rienmueller et al. and Anderson et al. do not suggest using an abort switch that also opens a closed valve that is adapted to either control inhalation or exhalation of the patient as mentioned in Section B.1.a. Since Beran does not suggest using an abort switch that also opens a closed valve that is adapted to either control inhalation or exhalation of the patient as recited in claim 15, the rejection is improper and should be withdrawn.

b. Claims 34-36

Claims 34-36 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Dietz, Rienmueller et al., Anderson et al. and Beran. Claims 34-36 depend directly or indirectly on claim 33. Accordingly, the rejection is improper since Anderson et al. is directed to non-analogous art. In addition, Dietz, Rienmueller et al. and Anderson et al. do not suggest using an abort switch that also opens selectively operable valve.” For reasons similar to those given above in Section B.1.b with respect to claim 33, there is no motivation to combine Anderson et al. with Dietz and Rienmueller et al. in the manner suggested by the Office Action since Anderson et al. fails to have its “kill switch” also open a selectively operable valve that is adapted to control both inhalation and exhalation of the patient. Since Beran does not suggest using an abort switch that also opens a selectively operable valve that is adapted to control both inhalation and exhalation of the patient as recited in claim 33, the rejection is improper and should be withdrawn.

3. Dietz, Rienmueller et al., Anderson et al. and Voss

a. Claims 27 and 28

Claims 27 and 28 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Dietz, Rienmueller et al., Anderson et al. and Voss. Claims 27 and 28 depend directly or indirectly on claim 15. Accordingly, the rejection is improper since Anderson et al. is directed to non-analogous art. In addition, Dietz, Rienmueller et al. and Anderson et al. do not suggest using an abort switch that also opens a closed valve that is adapted to either control inhalation or exhalation of the patient as mentioned in Section B.1.a. Since Voss does not suggest using an abort switch that also opens a closed valve that is adapted to either control

inhalation or exhalation of the patient as recited in claim 15, the rejection is improper and should be withdrawn.

The rejection of claim 27 is improper for the additional reason that there is no motivation to have a display attached to the mirror. Since there is no motivation in Voss or the other cited art to attach a display to the mirror of Voss, the rejection should be withdrawn.

b. Claims 37 and 38

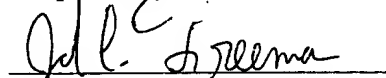
Claims 37 and 38 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of Dietz, Rienmueller et al., Anderson et al. and Voss. Claims 37 and 38 depend directly or indirectly on claim 33. Accordingly, the rejection is improper since Anderson et al. is directed to non-analogous art. In addition, Dietz, Rienmueller et al. and Anderson et al. do not suggest using an abort switch that also opens selectively operable valve.” For reasons similar to those given above in Section B.1.b with respect to claim 33, there is no motivation to combine Anderson et al. with Dietz and Rienmueller et al. in the manner suggested by the Office Action since Anderson et al. fails to have its “kill switch” also open a selectively operable valve that is adapted to control both inhalation and exhalation of the patient. Since Voss does not suggest using an abort switch that also opens a selectively operable valve that is adapted to control both inhalation and exhalation of the patient as recited in claim 33, the rejection is improper and should be withdrawn.

The rejection of claim 37 is improper for the additional reason that there is no motivation to have a display attached to the mirror. Since there is no motivation in Voss or the other cited art to attach a display to the mirror of Voss, the rejection should be withdrawn.

CONCLUSION

In view of the arguments above, Applicants respectfully submit that all of the pending claims 15 and 23-38 are in condition for allowance and seek an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,



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